TECHNICAL MANAGEMENT TEAM MEETING NOTES July 23, 2004

CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE PORTLAND, OREGON

1. Greeting and Introductions

The July 23 Technical Management Team meeting was chaired by Cindy Henriksen of the Corps and facilitated by Donna Silverberg. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Turner at 503/808-3945.

2. Dworshak Operation.

Henriksen said the purpose of today's conference call was to discuss the current air and water temperature situation at Lower Granite, and whether or not to change the current Dworshak operation to reduce water temperatures in the Clearwater and Lower Snake rivers. Dave Statler said it is very hot in Lewiston, currently; the forecast is calling for temperatures of 100 degrees+ over the next few days. Henriksen said that, according to the National Weather Service forecast, air temperatures are expected to moderate somewhat by Monday. She added that the tailrace temperature at Lower Granite reached 67.5 degrees yesterday.

Total river flow at Lower Granite is currently 33 Kcfs-35 Kcfs, Henriksen continued; the temperature of the Brownlee releases, measured at Oxbow, was 68 degrees yesterday. On Wednesday, we discussed the potential need for a TMT conference call if water temperatures were on the rise and the forecast was for continued hot weather; that is the reason for today's call. Do we want to increase the flow of cold water from Dworshak for a few days?

Statler said the Nez Perce Tribe would consider that a prudent action at this time. Sharon Kiefer said Idaho agrees. Paul Wagner said FPAC will discuss the water temperature situation further at a Monday conference call, and attempt to reach consensus on how long the increased Dworshak flow should continue.

One concern is that the cold water from Dworshak won't reach Lower Granite for two or three days, said Henriksen – the question is whether or not this change in operation will have the desired effect. She said she has been talking to the biologists at Lower Granite, who told her that fish health is not currently a concern at the project – mortality has been low. Yesterday mortality spiked to nearly 2%, but that was because it was a transport day, and there were more fish to be seen in the raceways. An increase in mortality on transport days is typical. Still, cumulative stress could be a problem down the road, said Kiefer – at this point, we just don't know. Turner said that, under the Fish Passage Plan, a daily mortality rate of 6% or higher for three consecutive days would trigger additional action. Wagner replied that the purpose of the proposed change in Dworshak operations is to stay ahead of the curve, to avoid a fish health

problem.

The group discussed the possibility of keeping the Dworshak outflow at its current level of 9.5 Kcfs, but reducing the release temperature of the water. It was agreed that more information is needed from the Fish and Wildlife Service about the effects of a lower Dworshak outflow on juveniles in the Lower Clearwater.

John Wellschlager said that, given the cost of this operation -2 Kcfs of spill costs ratepayers about \$100,000 per day at Dworshak - BPA would prefer to spill for as short a duration as possible. It was agreed to reconvene via conference call at 11 a.m. Monday to revisit this operation.

Henriksen summarized the change in Dworshak operations by saying that the Corps will increase Dworshak outflow to 11.5 Kcfs as soon as possible. The Corps will monitor the dissolved gas situation below Dworshak closely. The TMT will revisit the operation on Monday morning, and will likely reduce Dworshak outflow to full powerhouse capacity later that day. With that, today's conference call was adjourned.